HW#80H: SolvingQuadraticEq.

Honors Geometry

Tuesday, February 16th

*Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PD:\_\_\_\_\_\_*

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| *You can solve some quadratic equations by using the Zero-Product Property, which states that for any real numbers*  *Example: If* | |
| 1. What are the solutions of the equation ? | 1. What are the solutions of the equation ? |
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| 1. You are constructing a frame for a rectangular photo, which is 17 inches long and 11 inches tall. You want the frame to be the same width all the way around (the width can be represented by ) and the total area of the frame and photo to be 315 inches2. What should the outer dimensions of the frame be? Draw a labeled picture before solving this problem. | |
| 1. You are making a rectangular table and the area of the table should be 10 feet2. You want the length of the table to be 1 foot shorter than twice its width. What should the dimensions of the table be? | |
| 1. You are knitting a blanket. You want the area of the blanket to be 24 feet2. You want the length of the blanket to be 2 feet longer than its width. What should the dimensions of the blanket be? | |
| 1. You have a rectangular koi (a type of Asian fish) pond that measures 6 feet by 8 feet and has a walkway surrounding it on all four sides that has a width of You have enough concrete to cover 72 feet2 for a walkway. What should the width of the walkway be? | |
| 1. The height of a flare fired from the deck of a ship in distress can be modeled by , where *h* is the height of the flare above water and *t* is the time in seconds. Find the time it takes the flare to hit the water. | |